FY2017 ADOPTED BUDGET STORMWATER FUND





The City's stormwater facilities are managed by the Department of Public Works. In 2012, the City Council directed the City Manager to develop recommendations for the creation of a storm water enterprise fund to manage the growing costs of regulatory compliance, flood mitigation, water quality improvement, and to maintain aging stormwater infrastructure. In FY2014, the Stormwater Enterprise Fund was established. Revenues for this fund are generated by a new fee based on impervious coverage.

The management of the stormwater in the City includes administering the following programs:

- VA DEQ/MS4 Permit
- Compliance, BMP Management
- Stormwater Conveyance Infrastructure Rehabilitation/Replacement
- TMDL Compliance
- Private Development Oversight
 - o Chesapeake Bay Program
 - Erosion and Sediment Control
 - o Site Plan / Grading Plan Review
- Capital Improvement Program
- National Flood Insurance Program / Community Rating System Program
- Street Sweeping
- Geographic Information Systems

The greatest need of the City's stormwater conveyance system is capital maintenance. The system has aged or was built with insufficient conveyance capacity and, consequently, in many parts of the City fails to adequately carry a 2-year storm event (that storm with a 50% chance of occurring during any given year). Approximately 28% of the system in composed of corrugated metal piping (CMP). Given the age of the system much of the CMP is at or past its service life and is responsible for many of the service calls Operations receives. The City will address these critical needs through a comprehensive conditions assessment and planned infrastructure upgrades.

Compliance with state and federal mandates to reduce sediment, nitrogen, and phosphorus from stormwater runoff will be a challenge for the City. Staff estimates the City will need to spend \$15 million on stormwater quality projects by 2025 in order to meet the Chesapeake Bay water quality targets set by the state. City staff administer various programs and activities in order to comply with an array of related regulations that include the Federal Clean Water Act (e.g., National Pollutant Discharge Elimination System (NPDES), Municipal Separate Storm Sewer System (MS4) Permit, Total Maximum Daily Load (TMDL) and the Federal Emergency Management (FEMA) Flood Insurance Program where the City actively participates in the Community Rating System (CRS) to provide a flood insurance discount for its residents.

The City's Geographic Information Systems program is also supported by the Stormwater fund. GIS is integral to the stormwater utility, as it is used to establish billing units by analyzing imagery to determine impervious coverage of parcels. GIS is also used to catalogue data about all manner of operations on the stormwater system.

The FY2017 budget includes a rate increase of 2.0%, which will move the fee from \$18.00 to \$18.36 per 200 square feet of impervious coverage. Additional revenue is anticipated due to increases in impervious surface from development.

STORMWATER FUND REVENUES

| | FY2015 Actual | | | FY2016 Adopted | | FY2017 Adopted | Percent Change | |
|---|------------------|--------------------|----|--------------------|----|-------------------|-------------------|--|
| Service Charges Revenue from Use of Money and Property | \$ | 1,540,380 2,254 | \$ | 1,529,000 1,000 | \$ | 1,582,373 - | 3.49% -100.00% | |
| TOTAL REVENUE - STORMWATER FUND | \$ | 1,542,634 | \$ | 1,530,000 | \$ | 1,582,373 | 3.42% | |

STORMWATER FUND EXPENDITURES

| | FY2015 Actual | FY2016 Adopted | FY2017 Adopted | Percent Change |
|--------------------------------------|------------------|-------------------|-------------------|-------------------|
| Administration | \$ 679,119 | \$ 672,250 | \$ 624,146 | -7.16% |
| Operations | 666,615 | 728,439 | 712,422 | -2.20% |
| Debt Service | 87,728 | 129,311 | 221,087 | 70.97% |
| Reserves | - | - | 24,718 | |
| TOTAL EXPENDITURES - STORMWATER FUND | \$ 1,433,462 | \$ 1,530,000 | \$ 1,582,373 | 3.42% |

Stormwater Management

STORMWATER MANAGEMENT

SUMMARY OF SERVICES PROVIDED

The Department of Public Works provides management and operation of the City's stormwater conveyance system, including planning, design, construction, and rehabilitation of the system. In addition, funding is used to develop and implement capital improvements needed to provide high quality and reliable service. The department also manages the day-to-day operations of the Stormwater Utility Fund, which includes outreach, customer service, impervious coverage mapping updates, and credit program.

TRENDS AND ISSUES

- Debt service costs from recent stormwater capital projects is coming online and pressuring the operating budget. Small increases in revenue will be needed in out years to continue investments in the infrastructure.
- The fund's operating budget continues the trend of shifting expenses from the engineering to operation group to focus on system repairs and rehabilitation.

SIGNIFICANT CHANGES IN FY2017

None anticipated.

FY2017 DELIVERABLES

- Design of the W. Westmoreland, 4 Mile Run Retaining Wall, and Wren's Branch projects
- Submittal of Annual MS4 Report
- Processing of Stormwater Credit Applications

PRIORITIES FOR FUTURE FUNDING

 Capital funding (\$1,000,000 annual) – Capital funding for stormwater facilities reinvestment to address capacity, structural integrity, and compliance issues

ADOPTED POSITIONS BY FTE - 3.27 TOTAL

- 0.15 Director of Public Works
- 0.50 Principal Engineer
- 0.50 Civil Engineer
- 0.20 Contract Manager

- 0.75 Senior Engineer
- 0.67 Customer Service Representative
- 0.50 GIS Analyst

Stormwater Management

ADOPTED BUDGET

| | FY2015 Actual | FY2016 Adopted | FY2017 Adopted | Percent Change |
|--------------------------------|------------------|-------------------|-------------------|-------------------|
| Expenditures | | | | |
| Salaries and Wages | \$ 287,058 | \$ 294,474 | \$ 274,457 | -6.80% |
| Benefits | 98,310 | 96,216 | 84,891 | -11.77% |
| Professional and Contractual | 112,865 | 114,487 | 97,829 | -14.55% |
| Materials, Supplies, and Other | 21,299 | 29,373 | 36,369 | 23.82% |
| Capital Outlay | 3,435 | 7,700 | 600 | -92.21% |
| Admin Fees to General Fund | 156,151 | 130,000 | 130,000 | 0.00% |
| Total Expenditures | \$ 679,119 | \$ 672,250 | \$ 624,146 | -7.16% |

BUDGET TREND: FY2012 - 2017



Notes:

- Budget amounts prior to FY2014 are amounts budgeted for stormwater management in the General Fund.
- FY2014 reflects the beginning of the stormwater enterprise fund when more funding was received as a result of the fees established for stormwater.
- FY2015 decrease reflects declining revenue due to a reduction in the rate from \$19.80/billing unit to \$18.00/billing unit

Operations and Maintenance

STORM SEWER OPERATIONS AND MAINTENANCE

SUMMARY OF SERVICES PROVIDED

The operations crew is responsible for inspection, cleaning and repairing the stormwater system, which includes more than 26 miles of storm drain, 1,400 appurtenances and 8,100 feet of stream channel in the Four Mile Run and Tripps Run watersheds. The vast majority of the City's stormwater system was originally installed as the City grew during the 1930s through the 1960s. Today, many of these stormwater pipes and structures are beyond their expected life span and in some locations have failed or are near failing.

The Stormwater Crew utilizes vacuum and flusher trucks to clean structures and pipes, and to keep debris out of our streams. The crew also uses a television inspection truck to inspect and catalogue the condition of the infrastructure and diagnose problems, develop maintenance and repair priorities, and establish a record of system condition.

TRENDS AND ISSUES

- A four man stormwater crew was established in May of 2014. Since its creation the crew has
 mainly focused on the City's greatest immediate needs; inspecting and cleaning storm pipes
 and performing repairs to stormwater inlets and manholes.
- The crew also coordinates with Stormwater Administration to systematically collect hundreds of feet of pipe condition data using closed circuit television inspections.

SIGNIFICANT CHANGES IN FY2017

None anticipated.

FY2017 DELIVERABLES

- Sweep each street 5 times
- Clean 700 structures
- Flush 13 miles of pipe
- Video inspect 6 miles of pipe

ADOPTED POSITIONS BY FTE - 4.55 TOTAL

- 0.25 Superintendent of Public Works
- 0.20 Asst. Superintendent of Public Works
- 0.10 Sr. Administrative Assistant

- 1.00 Crew Leader
- 3.00 Maintenance Worker

Operations and Maintenance

ADOPTED BUDGET

| | FY2015 Actual | FY2016 Adopted | FY2017 Adopted | Percent Change |
|--------------------------------|------------------|-------------------|-------------------|-------------------|
| Expenditures | | | | |
| Salaries and Wages | \$ 184,726 | \$ 229,224 | \$ 243,706 | 6.32% |
| Benefits | 99,540 | 110,835 | 117,636 | 6.14% |
| Professional and Contractual | 259,097 | 280,000 | 270,000 | -3.57% |
| Materials, Supplies, and Other | 79,607 | 108,380 | 81,080 | -25.19% |
| Capital Outlay | 43,645 | - | - | 0.00% |
| Total Expenditures | \$ 666,615 | \$ 728,439 | \$ 712,422 | -2.20% |

BUDGET TREND: FY2011 - 2016



Notes:

- FY2014 reflects the beginning of the stormwater enterprise fund when more funding was received as a result of the fees established for stormwater.
- FY2015 reflects the reallocation of staff from other funds to the Stormwater fund.
 In FY2015, we also moved street sweeping costs from the General Fund to the Stormwater Fund.

Debt Service

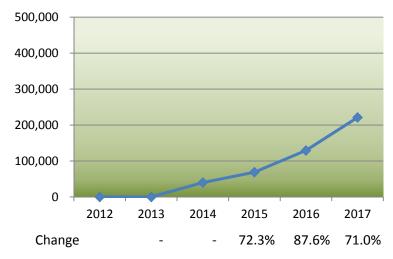
DEBT SERVICE

In December 2013 and again in December 2014, the City issued General Obligation Bonds to fund the capital projects for the Stomwater Fund. The principal and interest payment on these bonds are included in the FY2016 budget below.

ADOPTED BUDGET

| | FY2015 Actual | FY2016 Adopted | FY2017 Adopted | Percent Change |
|-------------------------------|------------------|-------------------|-------------------|-------------------|
| Expenditures | | | | |
| Professional and Contractual | \$ 9,078 | \$ - | \$ - | 0.00% |
| Principal | 35,000 | 75,000 | 144,512 | 92.68% |
| Interest | 43,650 | 54,311 | 76,575 | 40.99% |
| Net Expenditures | | | | |
| Supported by General Revenues | \$ 87,728 | \$ 129,311 | \$ 221,087 | 70.97% |
| | | | | |

BUDGET TREND: FY2012 - 2017



Notes

 Debt service increases every year as the fund addresses capital infrastructure needs with borrowing.

Debt Service

RESERVES

In FY2017, the Stormwater Fund budget includes an amount to be set aside for reserves. This will begin to establish the reserve for capital replacement so that future capital needs may be addressed while mitigating increases in fees.

ADOPTED BUDGET

| | FY2015 Actual | FY2016 Adopted | FY2017 Adopted | Percent Change |
|--------------------|------------------|-------------------|-------------------|-------------------|
| Expenditures | | | | |
| Reserves | | | 24,718 | _ |
| Total Expenditures | | | 24,718 | |
| | | | | |
| Total Expenditures | \$ | - \$ - | \$ 24,718 | |
| | | | | |